## SEQUENCE LISTING

<110> Burnham, Martin K. R.
Zalacain, Magdalena
Biswas, Sanjoy
Chalker, Alison F.
Ingraham, Karen A.
Traini, Christopher M.
Warren, Patrick V.

<120> tdk

<130> GM10201

<160> 3

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 639

<212> DNA

<213> Streptococcus pneumoniae

## <400> 1

atgtcaaaag	gatttttagt	ctctcttgag	ggaccagagg	gagcaggcaa	gaccagtgtt	60
ttagaggctc	tgctaccaat	tttagaggaa	aaaggagtag	aggtgttgac	gacccgtgaa	120
cctggcggag	tcttgattgg	ggagaagatt	cgggaagtga	ttttggatcc	aagtcatact	180
cagatggatg	ctaaaacaga	gctacttctc	tatattgcca	gtcgcagaca	gcatttggtg	240
gaaaaagttc	ttccagccct	tgaagctggc	aagttggtca	tcatggatcg	ttttatcgat	300
agttctgttg	cctatcaggg	atttggtcgt	ggcttagata	ttgaagccat	tgactggctc	360
aatcagtttg	cgacagatgg	gctcaaaccc	gatttgacac	tctattttga	catcgaggtg	420
gaagaagggc	tggctcgtat	tgctgcgaat	agtgaccgcg	aggttaatcg	tttggatttg	480
gaagggttgg	acttgcataa	aaaagttcgt	caaggctacc	tttctcttct	ggataaagag	540
ggaaatcgca	ttgtcaagat	tgatgctagt	ctccctttgg	agcaagttgt	ggaaactacc	600
aaggctgtct	tgtttgacgg	aatgggcttg	gccaaatga			639

<210> 2

<211> 212

<212> PRT



<400> 2 Met Ser Lys Gly Phe Leu Val Ser Leu Glu Gly Pro Glu Gly Ala Gly Lys Thr Ser Val Leu Glu Ala Leu Leu Pro Ile Leu Glu Glu Lys Gly 30 20 Val Glu Val Leu Thr Thr Arg Glu Pro Gly Gly Val Leu Ile Gly Glu 40 Lys Ile Arg Glu Val Ile Leu Asp Pro Ser His Thr Gln Met Asp Ala 60 55 Lys Thr Glu Leu Leu Tyr Ile Ala Ser Arg Arg Gln His Leu Val 70 75 Glu Lys Val Leu Pro Ala Leu Glu Ala Gly Lys Leu Val Ile Met Asp 90 85 Arg Phe Ile Asp Ser Ser Val Ala Tyr Gln Gly Phe Gly Arg Gly Leu 100 Asp Ile Glu Ala Ile Asp Trp Leu Asn Gln Phe Ala Thr Asp Gly Leu 120 115 Lys Pro Asp Leu Thr Leu Tyr Phe Asp Ile Glu Val Glu Glu Gly Leu 135 Ala Arg Ile Ala Ala Asn Ser Asp Arg Glu Val Asn Arg Leu Asp Leu 150 Glu Gly Leu Asp Leu His Lys Lys Val Arg Gln Gly Tyr Leu Ser Leu 175 170 Leu Asp Lys Glu Gly Asn Arg Ile Val Lys Ile Asp Ala Ser Leu Pro 185 Leu Glu Gln Val Val Glu Thr Thr Lys Ala Val Leu Phe Asp Gly Met 200 205 Gly Leu Ala Lys 210

<210> 3

<211> 25

<212> DNA

<213> Streptococcus pneumoniae

<400> 3
aactgagact ggctttaaga gatta

25